

TCT@ACC-i2: Invasive and Interventional Cardiology

THE RELATIONSHIP BETWEEN SHORT AND LONG-TERM ANTIPLATELET THERAPY USE AND STENT THROMBOSIS FOLLOWING PERCUTANEOUS CORONARY INTERVENTION WITH THE RESOLUTE ZOTAROLIMUS-ELUTING STENT

Oral Contributions
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Background: Continuation of dual antiplatelet therapy (DAPT), consisting of aspirin plus a P2Y₁₂ receptor antagonist, is currently recommended for 12 months following drug-eluting stent (DES) implantation. However, observational data suggest that a significant proportion of patients either interrupt or are unable to tolerate DAPT in this period. Whether earlier interruption and/or discontinuation of DAPT is associated with a higher risk of stent thrombosis (ST), particularly with newer generation DES, is not clearly defined.

Methods: One-year ST data from 4,930 patients treated with a Resolute™ Zotarolimus-eluting stent (R-ZES) in the global RESOLUTE clinical program were analyzed according to DAPT status. ST was assessed based on the timing of first DAPT interruption (0-3 vs. >3-12 months), and was further categorized by the type of interruption (permanent, interruption >14 days or interruption of >1 to <14 days). Comparison of longer-term outcomes (e.g. for patients on DAPT for 12 months vs longer-term use) is in progress.

Results: The mean patient age was 63.9 years; 30.2% had diabetes and 45.1% presented with an acute coronary syndrome. A total of 1071 (21.7%) patients had an interruption of DAPT during the first year after DES implantation. Among these, 256 (5.2% of the overall study cohort) had a first interruption within 3 months, with 5 ST events (one ARC definite ST and 4 ARC probable ST, 1.95% incidence of ARC definite/probable ST at 1 year). Of patients with DAPT interruption within 0-3 months, all 5 ST events occurred in the group of patients off DAPT for >14 days (n=194, including 119 patients who permanently discontinued DAPT). Notably, among the 815 patients (16.5% of the overall study cohort) with a first interruption beyond 3 months, there were no ST events at 1 year. Comparison of longer-term outcomes (e.g. for patients on DAPT for 12 months vs. longer-term use) will be presented.

Conclusions: A significant proportion of patients interrupted DAPT during the first year after R-ZES implantation. For patients interrupting DAPT after 3 months, the ST rate was very low, underscoring the need for further studies examining the optimal duration of DAPT after DES implantation.